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**Physical Science Thermal Energy (Chapter 6 Outline)**

***AS YOU READ, RESPOND TO THE FOLLOWING:***

*Vocabulary*: **Define in your own words**

Thermal energy-

heat-

temperature-

radiation-

conduction-

convection-

Heating appliance-

thermometer-

refrigerator-

heat engine-

**Respond to the questions/ prompts below:**

What happens to a material when it is heated? Explain. (2 pts)

In what ways can thermal energy be transferred? There are three major ways, explain how each was specifically transfers thermal energy. (6 pts)

What is the effect of having a small specific heat? Give an example of an object/thing that has a "small" or "low" specific heat. (2 pts)

What is the difference between heat and thermal energy? Explain. (2 pts)

How does a thermostat work? Explain how a bitmetallic coil relates to the function of how a thermostat works. (2 pts)

How does a refrigerator keep food cold? Explain in detail how coolant and thermal energy transfer is involved with the efficiency of a refrigerator. (4 pts)

What are the energy transformations in a car engine? Explain how each energy transformation occurs. (4 pts)

***ABOUT THE READING:***

Write three things that you learned about Thermal Energy*:*

***Make sure to write a full sentence.***

*Example: I learned that the most common type of thermal energy that is lost in a system is thermal energy that results from friction between two objects.*

*1.*

*2.*

*3.*